

Please type a plus sign (+) inside this box →

PTO/SB/01 (12-97)

Approved for use through 9/30/00. OMB 0651-0032

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**

Declaration Submitted with Initial Filing       Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	PSU 1813 (MIT 8231)
First Named Inventor	Daniel R. Deaver
<b>COMPLETE IF KNOWN</b>	
Application Number	09 / 412,821
Filing Date	October 5, 1999
Group Art Unit	1615
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**COMPOSITIONS AND METHODS FOR ENHANCING RECEPTOR-MEDIATED CELLULAR INTERNALIZATION**

the specification of which

*(Title of the Invention)*

is attached hereto

OR

was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number  and was amended on (MM/DD/YYYY)  (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?
			<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	
60/103,117	October 5, 1998	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PSU 1813 (MIT 8231)

9266/4

Please type a plus sign (+) inside this box → Approved for use through 9/30/00. OMB 0651-0032  
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**DECLARATION — Utility or Design Patent Application**

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

Additional U.S. or PCT International application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Customer Number  →  Place Customer Number Bar Code Label here.  
 Registered practitioner(s) name/registration number listed below

Name	Registration Number	Name	Registration Number
Patrea L. Pabst	31,284		
Robert A. Hodges	41,074		
Kevin W. King	42,737		

Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to:  Customer Number  OR  Correspondence address below or Bar Code Label

Name	Patrea L. Pabst			
Address	Arnall Golden & Gregory, LLP			
Address	2800 One Atlantic Center, 1201 West Peachtree Street			
City	Atlanta	State	GA	ZIP 30309-3450
Country	United States	Telephone	(404)873-8794	Fax (404)873-8795

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:	<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle if any)	Family Name or Surname			
Daniel R.	Deaver			
Inventor's Signature	<i>Daniel R. Deaver</i>			Date 4/4/99
Residence: City	Franklin	State	MA	Country US
Post Office Address	4 Maple Brook Lane			
Post Office Address				
City	Franklin	State	MA	ZIP 02038
				Country US

Additional inventors are being named on the \_\_\_\_\_ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Please type a plus sign (+) inside this box →

**DECLARATION****ADDITIONAL INVENTOR(S)  
Supplemental Sheet  
Page 1 of 1**

<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor				
Given Name (first and middle [if any])		Family Name or Surname				
David A.		Edwards				
Inventor's Signature						Date 11/5/97
Residence: City	Boston	State	MA	Country	US	Citizenship
Post Office Address	452 Beacon Street, Unit 6					
Post Office Address						
City	Boston	State	MA	ZIP	02115	Country
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor				
Given Name (first and middle [if any])		Family Name or Surname				
Inventor's Signature						Date
Residence: City		State		Country		Citizenship
Post Office Address						
Post Office Address						
City		State		ZIP		Country
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor				
Given Name (first and middle [if any])		Family Name or Surname				
Inventor's Signature						Date
Residence: City		State		Country		Citizenship
Post Office Address						
Post Office Address						
City		State		ZIP		Country

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicants:** Daniel R. Deaver and David A. Edwards

**Group Art Unit:** 2165

**Serial No:** 09/412,821

**Batch No.:** H28

**Filed:** October 5, 1999

**Examiner:** Azpuru, C.

**For:** **COMPOSITIONS AND METHODS FOR ENHANCING  
RECEPTOR-MEDIATED CELLULAR INTERNALIZATION**

**BOX ISSUE FEE**

Assistant Commissioner for Patents  
Washington, D. C. 20231

**POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST  
AND REVOCATION OF PRIOR POWERS**

Sir:

As owner of the entire interest of the above-identified patent application, as evidenced by the attached Statement Under 37 C.F.R. § 3.73(b), all powers of attorney previously given are hereby revoked and the following attorneys and agents are hereby appointed to prosecute and transact all business in the Patent and Trademark Office connected therewith:

Patrea L. Pabst  
Zhaoyang Li  
Rivka Monheit

Registration No. 31,284  
Registration No. 46,872  
Registration No. P-48,731

U.S.S.N.: 09/412,821  
Filed: October 5, 1999  
**Power of Attorney by Assignee  
of Entire Interest and  
Revocation of Prior Powers**

**Please send all correspondence relating to the above-identified  
patent application to:**

**Patrea L. Pabst  
HOLLAND & KNIGHT LLP  
Suite 2000, One Atlantic Center  
1201 West Peachtree Street, N.E.  
Atlanta, Georgia 30309-3400**

**(404) 817-8473 - Telephone  
(404) 817-8588 - Fax**

The undersigned signatory (whose title is supplied below) is empowered to act on behalf of the assignee identified below, and has reviewed all the documents in the chain of title of the patent application and, to the best of undersigned's knowledge and belief, title is in the assignee.

**THE PENN STATE  
RESEARCH FOUNDATION**

By: Ronald J. Huss

Name: Ronald J. Huss

Title: Director, Intellectual Property Office

Date: 7/6/01

ATL1 #468874 v1

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Daniel R. Deaver and David A. Edwards

Application No./Patent No.: 09/412,821 Filed/Issue Date: October 5, 1999  
 Entitled: COMPOSITIONS AND METHODS FOR ENHANCING RECEPTOR-MEDIATED CELLULAR INTERNALIZATION

The Penn State Research Foundation, a Corporation  
 (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

- the assignee of the entire right, title, and interest; or
- an assignee of less than the entire right, title and interest.  
 The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

A.  An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 010398 Frame 0611, or for which a copy thereof is attached.

OR

B.  A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

7/4/01  
 Date

Ronald J. Huss

Typed or printed name

Ronald J. Huss

Signature

Director, Intellectual Property Office

Title



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

FEBRUARY 24, 2000

PTAS

ARNALL GOLDEN & GREGORY, LLP  
PATREA L. PABST, ESQ.  
2800 ATLANTIC CENTER  
1201 WEST PEACHTREE STREET  
ATLANTA, GA 30309-3450



\*101208440A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/22/1999

REEL/FRAME: 010398/0611  
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

DEAVER, DANIEL R.

DOC DATE: 11/04/1999

ASSIGNOR:

EDWARDS, DAVID A.

DOC DATE: 11/05/1999

ASSIGNEE:

PENN STATE RESEARCH FOUNDATION,  
THE  
207 OLD MAIN  
UNIVERSITY PARK, PENNSYLVANIA 16802

SERIAL NUMBER: 09412821

FILING DATE: 10/05/1999

PATENT NUMBER:

ISSUE DATE:

RECEIVED

MAR 01 2000

PATENT DEPT.

DOCKETED FOR PSU 78/3  
BY JSH

010398/0611 PAGE 2

SHIRLIE SIMON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

11-30-1999



MHD  
11.30.99

101208440

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

**TO: The Commissioner of Patents and Trademarks:** Please record the attached original document(s) or copy(ies).

**Submission Type**

<input checked="" type="checkbox"/> New	<input type="checkbox"/> Resubmission (Non-Recordation)
<input type="checkbox"/> Document ID# _____	<input type="checkbox"/> Correction of PTO Error
<input type="checkbox"/> Reel # _____ Frame # _____	<input type="checkbox"/> Corrective Document
<input type="checkbox"/> Reel # _____ Frame # _____	

**Conveyance Type**

<input checked="" type="checkbox"/> Assignment	<input type="checkbox"/> Security Agreement
<input type="checkbox"/> License	<input type="checkbox"/> Change of Name
<input type="checkbox"/> Merger	<input type="checkbox"/> Other _____
<b>U.S. Government</b> (For Use ONLY by U.S. Government Agencies)	
<input type="checkbox"/> Departmental File	<input type="checkbox"/> Secret File

**Conveying Party(ies)**

<input type="checkbox"/> Mark if additional names of conveying parties attached	Execution Date Month Day Year
	11041999

Name (line 1) Deaver, Daniel R.

Name (line 2) \_\_\_\_\_

**Second Party**

Name (line 1) Edwards, David A.

Name (line 2) \_\_\_\_\_

Execution Date  
Month Day Year

11051999

**Receiving Party**

<input type="checkbox"/> Mark if additional names of receiving parties attached	<input type="checkbox"/> If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)				
Name (line 1) The Penn State Research Foundation					
Name (line 2) _____					
Address (line 1) 207 Old Main					
Address (line 2) _____					
Address (line 3) University Park	City	Pennsylvania	State/Country	16802	Zip Code

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name _____
Address (line 1) _____
Address (line 2) _____
Address (line 3) _____
Address (line 4) _____

11/29/1999 DHGUYEN 00000217 09412821

FOR OFFICE USE ONLY

01 FC:581

40.00 00

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to: PSU 1813 (MIT 8231) 9266/4  
Commissioner of Patents and Trademarks - Box Assignments Washington, D.C. 20231

**Correspondent Name and Address**

Area Code and Telephone Number **(404) 873-8794**

Name **Patrea L. Pabst, Esq.**

Address (line 1) **Arnall Golden & Gregory, LLP**

Address (line 2) **2800 One Atlantic Center**

Address (line 3) **1201 West Peachtree Street**

Address (line 4) **Atlanta, GA 30309-3450**

**Pages** Enter the total number of pages of the attached conveyance document  
including any attachments. # **3**

**Application Number(s) or Patent Number(s)**

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

**Patent Application Number(s)**

09412821		

**Patent Number(s)**


If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month **Day** **Year**

**Patent Cooperation Treaty (PCT)**

Enter PCT application number

only if a U.S. Application Number  
has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

**Number of Properties**

Enter the total number of properties involved. # **1**

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$ **40.00**

**Method of Payment:**

**Deposit Account**

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Enclosed  Deposit Account

Deposit Account Number: # **01-2507**

Authorization to charge additional fees:

Yes

No

**Statement and Signature**

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Patrea L. Pabst

Name of Person Signing

Reg. No.: 31,284

Signature

*PLP*  
*11/18/99*

Date

## ASSIGNMENT

We, Daniel R. Deaver of 4 Maple Brook Lane, Franklin, Massachusetts 02038, and David A. Edwards of 452 Beacon Street, Unit 6, Boston, Massachusetts 02115, in consideration of ten dollars and other valuable consideration paid to us by The Penn State Research Foundation, a corporation of the State of Pennsylvania, having its principal place of business at 207 Old Main, University Park, Pennsylvania 16802, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said The Penn State Research Foundation, its successors and assigns, the entire interest for the United States of America, and its territories and all foreign countries and jurisdictions, including all rights of priority under the International Convention for the Protection of Industrial Property, in a certain invention or improvement in "*Compositions and Methods for Enhancing Receptor-Mediated Cellular Internalization*" described in U.S. Serial No. 09/412,821 filed in the United States Patent and Trademark Office on October 5, 1999, by Daniel R. Deaver and David A. Edwards, which claims priority to U.S. Provisional Application Serial No. 60/103,117 filed in the United States Patent and Trademark Office on October 5, 1998, and in all Letters Patent of the United States and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any provisional, divisional, continuation, continuation-in-part, reissue, or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns, but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and its territories and in all other foreign countries and jurisdictions to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation, and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

Title: "Compositions and Methods for Enhancing  
Receptor-Mediated Cellular Internalization"  
By: Daniel R. Deaver and David A. Edwards  
Filed: October 5, 1999  
ASSIGNMENT

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 4<sup>th</sup> day of November, 1999.

Daniel R. Deaver  
Daniel R. Deaver

State of Massachusetts )  
County of Middlesex )

Then personally appeared the above named Daniel R. Deaver and acknowledged the foregoing instrument to be his free act and deed, before me this 4<sup>th</sup> day of November, 1999.

Debra J. Koufos  
NOTARY PUBLIC  
My commission expires Mar. 12, 2004

Debra J. Koufos  
Notary Public

My Commission expires: \_\_\_\_\_

Title: "Compositions and Methods for Enhancing  
Receptor-Mediated Cellular Internalization"  
By: Daniel R. Deaver and David A. Edwards  
Filed: October 5, 1999  
ASSIGNMENT

WITNESS my hand and seal this 5 day of November, 1999.



David A. Edwards

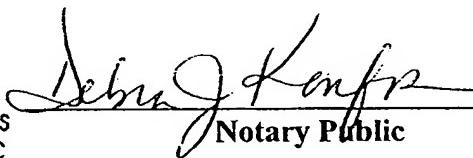
State of Massachusetts )

County of Middlesex )

Then personally appeared the above named David A. Edwards and acknowledged  
the foregoing instrument to be his free act and deed, before me this 5th day of  
November, 1999.

Debra J. Koufos  
NOTARY PUBLIC

My Commission expires Mar. 12, 2004

  
Debra J. Koufos  
Notary Public

My Commission expires: \_\_\_\_\_